Army set to meet year-end burn goal for chemical weapons

(Tuesday, 13 March 2007) - Written by Suzanne Ashe
- Last Updated (Thursday, 15 March 2007)

For once, the Army is hitting its target for destroying chemical weapons.

After years of deadline extensions, Tooele Chemical Disposal Facility and three other chemical weapon disposal sites in the country are on schedule to destroy 2,230 tons of mustard agent by the end of the year, said Greg Mahall, spokesman for the U.S. Army Chemical Materials Agency.

The Chemical Weapons Convention, a 10-year agreement which went into effect in April 1997, required the United States to destroy all of its chemical weapons stockpile by April 2007. However, each April since 1997 the Army has asked for an extension. The Department of Defense restructured the program in 2003. Since then, the program has destroyed more than 1,500 tons of chemical agents per year, according to a DOD budget report published last February.

The new deadline for 45 percent of all chemical agent weapons in eight different locations to be destroyed is Dec. 31, 2007.

The Tooele site, along with sites in Indiana, Oregon, Arkansas, and Alabama, had destroyed 43 percent of the weapons as of last Wednesday with only 2 percent more to go by the end of the year.

Chemical weapons destroyed at former disposal sites at Johnston Atoll in the South Pacific and at Aberdeen, Md., which finished operations and closed on Monday, also count toward the end goal.

Two more chemical disposal plants are slated to be built in Colorado and Kentucky. According to the DOD budget report, the Pueblo Chemical Agent Destruction Pilot Plant will reach final design completion this spring. The Blue Grass Chemical Agent Destruction Pilot Plant will reach final design completion this fall.

With the addition of these two plants, the deadline of April 2012 for 100 percent of the agent stockpile to be eliminated should be met.

"We are making good progress," Mahall said of all of all the sites, not just Tooele.

According to Mahall, the process for destroying chemical agents is to drain the metal containers of liquid and process them through a furnace/pollution abatemen.t system while the liquid agent is burned in a separate liquid incinerator. The agent is incinerated at 2,000 degrees Fahrenheit or higher. The metal casings, depending on what material they are

made of, go in to the incinerator on a tray like an egg carton and are burned at 1,500 degrees Fahrenheit.

A third incinerator destroys ash and trash left over from the process, Mahall said. The resulting air discharge runs through about 20 carbon filters to ensure it is purified.

Trial burns that concluded in January allowed one-ton containers to be processed. Prior to the trial burn, the maximum set amount of agent that could be destroyed at a time was 632 pounds. A lot was learned about the burning process during the trial, such as the discovery of mercury in the agent.

The presence of mercury, Mahall said, was like finding egg shells in cake batter when the recipe didn't call for eggs.

"The agent was clear water. What we got was all sorts of cross-contamination," he said. "Mercury was not supposed to be there because it creates more complications such as air emissions.

The technology for destroying chemical agents has not changed much in the past 10 years, Mahall said. The agents that are being destroyed in other locations include nerve agents, or VX agents, which are more dangerous than the mustard gas burned at the Tooele facility. The Tooele plant completed processing VX agents and residual products by October 2005. By August 2006 the machinery had been converted to process munitions and ton containers, which hold mustard gas.

Some of the agents predate World War I. More sophisticated nerve agents were developed during the Cold War. The last time the U.S. manufactured chemical agents on a mass scale was in 1968.

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